

[Forms](#)[Contact List](#)[SBMS Instructions](#)[Help Desk](#)

**Find Subject Areas:**

[Show Side Menu](#) **Search Subject Areas & Legacy Documents:**

Subject Area: **Transfer of Hazardous Materials Onsite**

## Contents: Transfer of Hazardous Materials Onsite

Effective Date: **June 2001**

Point of Contact: [Transportation Safety Officer](#)

Section	Overview of Content (see section for full process)
<a href="#">Introduction</a>	
<a href="#">1. Packaging and Transferring Materials of Trade (MOT) Onsite</a>	<ul style="list-style-type: none"><li>• Transfer and package MOT in compliance with Laboratory and regulatory requirements.</li><li>• Determine if chemical container is bar coded with CMS label.</li></ul>
<a href="#">2. Packaging and Transferring Hazardous Material Onsite</a>	<ul style="list-style-type: none"><li>• Transfer and package material in compliance with Laboratory and regulatory requirements.</li><li>• Determine if material is excluded as MOT.</li><li>• Determine if chemical container is bar coded with CMS label.</li></ul>
<a href="#">Definitions</a>	
<b>Exhibits</b> <a href="#">Transfer of Hazardous Material Onsite Flowchart</a>	
<b>Forms</b> <a href="#">BNL On-site Transfer/Safety Assessment Form</a>	

## Training Requirements and Reporting Obligations

This subject area does not contain training requirements.

This subject area may or may not contain reporting obligations. See the subject area until obligations are listed here.

## References

49 CFR 173.6, Materials of Trade

[Chemical Management System Chemical Transfer Sheet](#)

[Hazardous Material Transportation Manual](#) Program Description

[Hazardous Material Transportation Safety](#) Management System Description

[Hazardous Waste Management](#) Subject Area

[Spill Response](#) Subject Area

[Standard Practice Instruction \(SPI\) 5-05, Government Vehicles](#)

[Transportation of Hazardous Materials Offsite](#) Subject Area

[What Hazardous Materials Regulations Apply to Materials of Trade?](#)

## Standards of Performance

Managers shall manage work to control risks and hazards, ensure customer satisfaction, and provide a benefit to BNL.

Managers shall analyze work for hazards, authorize work to proceed, and ensure that work is performed within established controls.

All staff and users shall identify, evaluate, and control hazards in order to ensure that work is conducted safely and in a manner that protects the environment and the public.

Managers shall ensure that work is planned to prevent pollution, minimize waste, and conserve resources, and that work is conducted in a cost-effective manner that eliminates or minimizes environmental impact.

All staff and users shall ensure that they are trained and qualified to carry out their assigned responsibilities, and inform their supervisor if they are assigned to perform work for which they are not properly trained or qualified.

All staff and guests shall promptly report accidents, injuries, ES&H deficiencies, emergencies, and off-normal events in accordance with procedures.

Managers shall establish, implement, and track appropriate actions to correct weaknesses in performance and areas for improvement.

## Management System


This subject area belongs to the management system.

[Back to Top](#)

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001-/standard/2x/2x00t011.htm

Send a question or comment to the [SBMS Help Desk](#)  
[Disclaimer](#)



[Forms](#)[Contact List](#)[SBMS Instructions](#)[Help Desk](#)

**Find Subject Areas:**

[Show Side Menu](#) **Search Subject Areas & Legacy Documents:**

Subject Area: **Transfer of Hazardous Materials Onsite**

## Introduction: Transfer of Hazardous Materials Onsite

Effective Date: **June 2001**

Point of Contact: [Transportation Safety Officer](#)


This subject area covers the step-by-step process that BNL staff and non-BNL staff must follow to package and transfer hazardous materials between BNL facilities onsite, except for materials transferred by staff in the Isotopes & Special Material Group, Procurement and Property Management Division (Traffic Office), and Waste Management Division. These divisions have specific Standard Operating Procedures (SOPs) to control the packaging and transferring of hazardous materials. This subject area is designed to ensure that all hazardous material required to be transferred onsite will be properly packaged, labeled, and handled to ensure the safety of the staff, and in compliance with appropriate regulations as defined in the [Hazardous Material Transportation Manual](#) Program Description.

Refer to the [Transfer of Hazardous Material Onsite Flowchart](#) for an overview of the procedures described in this subject area. See the [Hazardous Material Transportation Safety](#) Management System Description for an overview of the Transportation Safety Program.

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001/standard/2x/2x00i011.htm

Send a question or comment to the [SBMS Help Desk](#)  
[Disclaimer](#)



[Forms](#)[Contact List](#)[SBMS Instructions](#)[Help Desk](#)

**Find Subject Areas:**

**Show Side Menu** **Search Subject Areas & Legacy Documents:**

Subject Area: **Transfer of Hazardous Materials Onsite**

## 1. Packaging and Transferring Materials of Trade (MOT) Onsite

Effective Date: **June 2001**

Point of Contact: [Transportation Safety Officer](#)

## Applicability

This information applies to BNL staff and non-BNL staff who package and transfer Materials of Trade (MOT) between BNL facilities onsite. It does not apply to materials transferred by staff in the Isotopes & Special Material Group, Procurement and Property Management Division (Traffic Office), and Waste Management Division.

## Required Procedure

Certain hazardous materials, when used in direct support of Brookhaven's business, may be transferred from one location to another by a staff member for his or her own use as "Materials of Trade," i.e., hazardous chemicals or other hazardous material which will be consumed by the staff member's work. The regulations for transferring MOT are much less restrictive and are based on a quantity limit for specific Department of Transportation hazard classes. The [BNL Materials of Trade \(MOT\) Table](#) exhibit in the [Transportation of Hazardous Materials Offsite](#) Subject Area provides the quantity limits for MOT commonly used at BNL that can be transferred. For those materials that are not in the BNL MOT exhibit, but still fall under the [DOT Materials of Trade \(MOT\) Hazard Classes](#) exhibit in the [Transportation of Hazardous Materials Offsite](#) Subject Area, consult a [Transportation Safety Department/Division Point of Contact \(POC\)](#) or the [Transportation Safety Officer \(TSO\)](#). Contact the TSO or your Transportation Safety Department/Division POC for instructions on adding an MOT to the BNL MOT exhibit.

Following these procedures ensures that the Laboratory is in compliance with the requirements in 49 CFR 173.6, Materials of Trade.

BNL staff and non-BNL staff transferring MOT follow the steps below.

<b>Step 1</b>	<p>When packaging MOT, ensure that the following conditions are met:</p> <ul style="list-style-type: none"><li>• Incompatible chemicals are not contained in the same outer packaging (See the exhibit on <a href="#">Incompatible Chemicals</a> in the <a href="#">Hazardous Waste Management</a> Subject Area).</li><li>• Packaging is leak-tight, securely closed, secured against movement in the vehicle, and protected against damage.</li><li>• Packaging is as good as manufacturer's original packaging, or receptacles are secured against movement inside cages, bins, boxes, or compartments. <b>Note:</b> For example, gasoline must be in a metal or plastic container that conforms to OSHA requirements. Containers should have approval marked.</li><li>• Outer packaging or receptacles are marked with the common name of the hazardous material.</li><li>• A BNL vehicle is used whenever possible to transfer MOT associated with work at BNL. The driver of a BNL vehicle must follow <a href="#">Standard Practice Instruction (SPI) 5-05, Government Vehicles</a>. If a private vehicle must be used, the Department/Division must</li></ul>
---------------	--

	<p><a href="#">Government Vehicles</a> in a private vehicle must be used; the Department Division must communicate to the driver the following requirements:</p> <ul style="list-style-type: none"> <li>o The driver has a valid state driver's license appropriate for the vehicle being operated;</li> <li>o The vehicle must be in good mechanical condition and have a valid state safety inspection;</li> <li>o The vehicle must be insured with at least the required minimum liability insurance required by the state where the vehicle is registered;</li> <li>o The driver must obey all state and local traffic rules and regulations;</li> <li>o The driver must possess basic hazard information on the commodity being transported (e.g., Material Safety Data Sheet).</li> </ul> <p><b>Note:</b> Contact a <a href="#">Transportation Safety Subject Matter Expert</a> for assistance in packaging your material.</p> <p><b>Note:</b> If a spill occurs during the transport of MOT, call 911 or 2222 and follow the <a href="#">Spill Response</a> Subject Area.</p>
<b>Step 2</b>	<p>Determine if the chemical container is bar coded with a Chemical Management System (CMS) label. If the chemical container has a CMS bar code label and you are transferring it to another building or storage area onsite, complete and forward a <a href="#">Chemical Management System Chemical Transfer Sheet</a> to the <a href="#">CMS Team</a>, Building 129, to notify them of the new location. Do not remove the CMS bar code label when transferring the chemical container to a new on-site location.</p> <p><b>Note:</b> When involving contracted services (i.e., riggers), to move material, the requester has the responsibility to comply with CMS requirements.</p>

## Guidelines

The driver should read and possess a copy of the DOT Brochure [What Hazardous Materials Regulations Apply to Materials of Trade?](#)

## References

[Chemical Management System Chemical Transfer Sheet](#)

[Hazardous Waste Management](#) Subject Area

[Spill Response](#) Subject Area

[Standard Practice Instruction \(SPI\) 5-05, Government Vehicles](#)

[Transportation of Hazardous Materials Offsite](#) Subject Area


[What Hazardous Materials Regulations Apply to Materials of Trade?](#)

| [Continue to Next Page](#) |

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001/standard/2x/2x01d011.htm

Send a question or comment to the [SBMS Help Desk](#)  
[Disclaimer](#)



[Forms](#)
[Contact List](#)
[SBMS Instructions](#)
[Help Desk](#)

Find Subject Areas:

[Show Side Menu](#) Search Subject Areas & Legacy Documents:

Subject Area: **Transfer of Hazardous Materials Onsite**

## 2. Packaging and Transferring Hazardous Material Onsite

Effective Date: **June 2001**

Point of Contact: [Transportation Safety Officer](#)

## Applicability

This information applies to BNL staff and non-BNL staff who package and transfer hazardous material (non-Materials of Trade [MOT]) between BNL facilities onsite. It does not apply to material transferred by staff in the Isotopes & Special Material Group, Procurement and Property Management Division (Traffic Office), and Waste Management Division.

## Required Procedure

<b>Step 1</b>	<p>Work with the <a href="#">Transportation Safety Subject Matter Expert (SME)</a> (if needed) to package and transfer hazardous material using one of the following methods when the material is being transferred by a motorized vehicle.</p> <ul style="list-style-type: none"> <li>Compliance with DOT regulations (go to <a href="#">Transportation of Hazardous Material Offsite Subject Area</a>), or</li> <li>Compliance with the BNL <a href="#">Hazardous Material Transportation Manual (HMTM)</a> Program Description.</li> </ul> <p><b>Note:</b> Following this subject area ensures compliance with the HMTM Program Description).</p>
<b>Step 2</b>	Determine if the material is excluded as MOT (see the section on <a href="#">Packaging and Transferring Materials of Trade (MOT) Onsite</a> ). If the material is MOT, follow the requirements of that section.
<b>Step 3</b>	Determine if the material to be transferred has already been evaluated using the <a href="#">BNL On-site Transfer/Safety Assessment Form</a> .
<b>Step 4</b>	If the material has been previously evaluated and there are no significant changes (within the bounds evaluated), package and transfer the material as described on the BNL On-site Transfer/Safety Assessment Form. If a material is determined to be a moderate or high hazard, a copy of the form (with the new transfer date) must accompany the material. Go to step 6.
<b>Step 5</b>	If material has not been previously evaluated, complete the BNL On-site Transfer/Safety Assessment Form. For guidance regarding the completion of this form, read Chapter 5 of the HMTM Program Description and notify a Transportation Safety SME.
<b>Step 6</b>	Determine if the chemical container is bar coded with a CMS label. If the chemical container has a CMS bar code label and you are transporting it to another building or storage area onsite, complete and forward a <a href="#">Chemical Management System Chemical Transfer Sheet</a> to the <a href="#">CMS Team</a> , Building 129, to notify them of the new location. Do not remove the CMS bar code label when transferring the chemical container to a new on-site location.

<b>Step 7</b>	<p>When packaging hazardous materials, make sure that the following conditions are met:</p> <ul style="list-style-type: none"> <li>• Incompatible chemicals are not contained in the same outer packaging (see the exhibit on <a href="#">Incompatible Chemicals</a> in the <a href="#">Hazardous Waste Management</a> Subject Area).</li> <li>• Packaging is leak-tight, securely closed, secured against movement, and protected against damage.</li> <li>• Packaging is as good as manufacturer's original packaging, or receptacles are secured against movement inside cages, bins, boxes, or compartments.</li> <li>• Outer packaging or receptacles are marked with the common name of the hazardous material.</li> </ul> <p><b>Note:</b> Contact a Transportation Safety SME for assistance with packaging if necessary.</p>
<b>Step 8</b>	<p>Transfer material according to the requirements on the BNL On-site Transfer/Safety Assessment Form.</p> <p><b>Note:</b> If there are any injuries/spills of this material during transfer, call 911 or 2222 and follow the <a href="#">Spill Response</a> Subject Area.</p> <p><b>Note:</b> The most expedient route should be utilized for hazardous material transfers, with no unnecessary stopovers.</p> <p><b>Note:</b> Only Laboratory/government vehicles may be used for transferring greater than MOT quantities.</p>

## References

[Chemical Management System Chemical Transfer Sheet](#)

[Hazardous Material Transportation Manual](#) Program Description

[Transportation of Hazardous Material Offsite](#) Subject Area

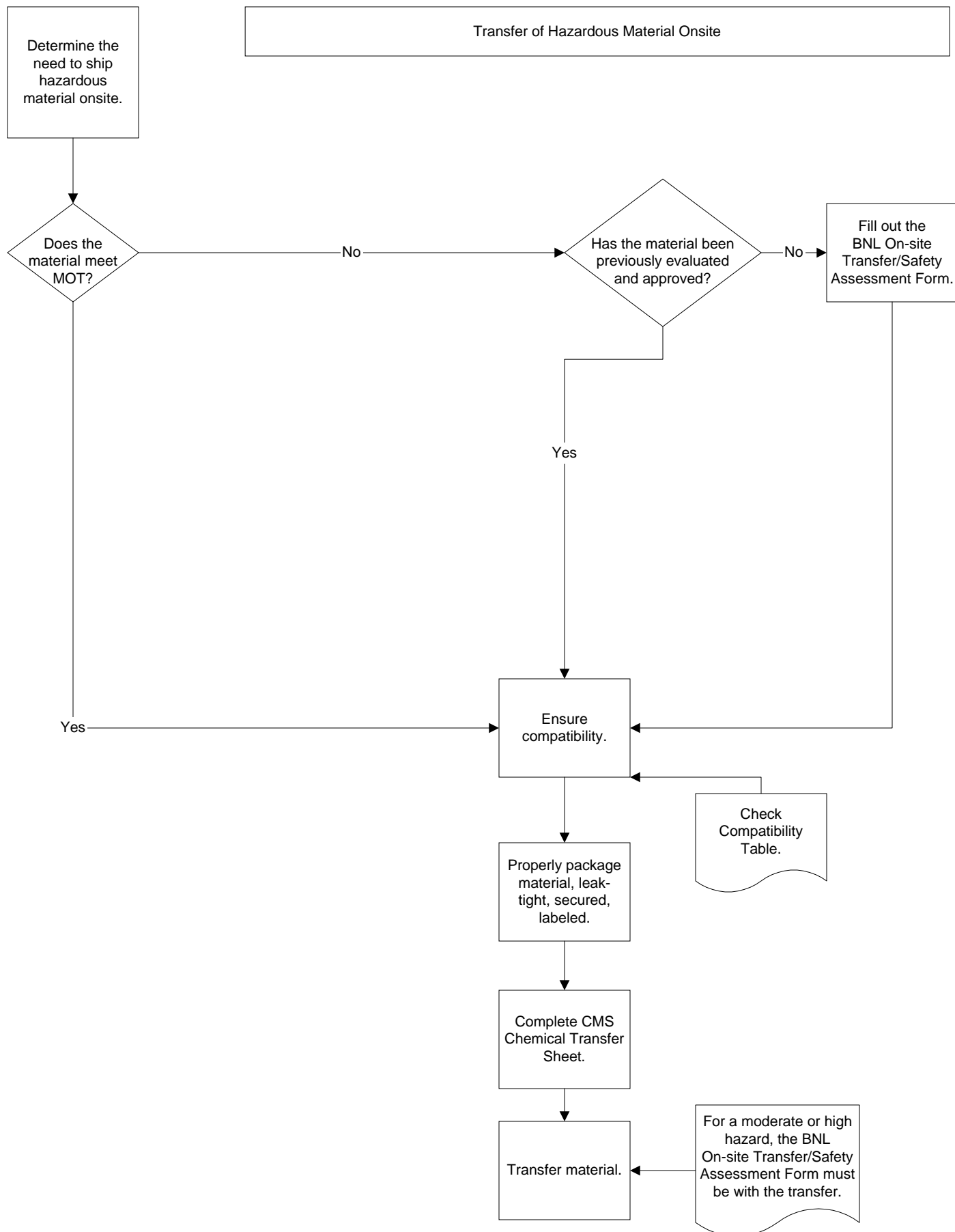
[Spill Response](#) Subject Area

| [Go to Previous Page](#) |

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001/standard/2x/2x02d011.htm

Send a question or comment to the [SBMS Help Desk](#)  
[Disclaimer](#)





## BNL On-site Transfer/Safety Assessment Form

Requested By:

Department/Division:

Principal Investigator:

Date of Transfer:

From Building/Area:

Time of Transfer:

Building or Area:

**Safety Assessment** (Chapter 5 of the HMTM provides detailed guidance).

### 1. Material Characteristics/Classification

a) Name (e.g., Commercial, CAS):

b) Quantity:

c) Type of Container:

d) Radioactive:

Yes ☐ No ☐

e) Isotopes of Concern and Estimated Level of Activity:

*If the material is classified as radioactive, Facility Support must provide a radiological survey before transferring it, and attach completed survey.*

f) Does the material contain fissile isotopes in excess of 125 g U-235, 80 g U-233, 80 g Pu, or in combination such that  $g \text{ U-235}/125 + g \text{ U-233}/80 + g \text{ Pu}/80 > 1$ ? Yes ☐ No ☐

*If yes, the BNL Criticality Safety Officer must evaluate the material for criticality safety measures and controls.*

g) Is the material hazardous, as defined in 49 CFR 172.101, Chapter 6 or Chapter 7 of the HMTM? Yes ☐ No ☐

*If yes, then you are required to continue this safety assessment analysis unless the material meets one of the following criteria:*

- The transfer is covered by Subject Areas and has previously been evaluated for transfer by the Isotopes and Special Materials Group, Shipping and Receiving, Waste Management Division, or the Transportation Safety Officer (TSO).
- The transfer is routine and has been previously evaluated for transfer.
- Material is defined as a Material of Trade or is a Small Quantity Exempted.

h) Is the material a Material of trade (MOT)?

Yes ☐ No ☐

i) Is the material an excepted quantity as defined by 49 CFR (e.g. limited quantity, small quantity)?

Yes ☐ No ☐

j) Does the material meet the definition of radioactive material in quantities greater than the DOE Std-1027-92 thresholds for Category 3 Nuclear quantities. (See [Table A.1. Thresholds for Radionuclides](#) ).

Yes ☐ No ☐

k) What is the materials classification:      Hazard Class:      UN #:

## 2. Material Hazard Assessment

What hazard does your material pose? (See Chapter 6 of the HMTM for guidance).

Low	(PG III)	<input type="checkbox"/>
Medium	(PG II)	<input type="checkbox"/>
High	(PG I)	<input type="checkbox"/>
Low	No Packing Group	<input type="checkbox"/>
Low	Excepted Radioactive	<input type="checkbox"/>
Medium	LSA/SCO	<input type="checkbox"/>
High	Type A, Type B, >Cat. 3, and HRCQ	<input type="checkbox"/>

## 3. Material Hazard Level

What hazard would your material pose to personnel, equipment, and environment should containment be lost during transfer?

Low	<input type="checkbox"/>
Medium	<input type="checkbox"/>
High	<input type="checkbox"/>

## 4. Package Types

What type of package is your material in?

DOT	Low	<input type="checkbox"/>
DOT-E	Medium	<input type="checkbox"/>
Non-DOT	High	<input type="checkbox"/>

*If your package is Non-DOT, it must be evaluated in accordance with Chapter 5 of the HMTM, and you must acquire approval from the TSO before transferring your material in this package.*

## 5. Transfer Assessment

What type of transfer is this?

Routine	Low	<input type="checkbox"/>
Exclusive Use	Medium	<input type="checkbox"/>
Nonroutine	High	<input type="checkbox"/>

*If more than one hazardous material is being transferred on the transport vehicle, check compatibility of lading with packaging materials and compatibility during transport of multiple hazardous materials.*

What hazard does transferring your material pose? (See Chapters 5, 6, and 7 of the HMTM).

Low	<input type="checkbox"/>
Medium	<input type="checkbox"/>
High	<input type="checkbox"/>

## 6. Transportation System Assessment and Evaluation

Using the information gathered in steps 1 through 5, determine the minimum requirements that your transportation system must have to transfer your material. Examples of using the information gathered in step 1 through 5 can be found in [Table A.1. Thresholds for Radionuclides](#).

Your material transfer has been rated as low ☐ moderate ☐ high ☐  
Therefore, your transportation system must meet the requirements for that level stated in Chapter 5 of the HMTM.

## 7. Transportation System Documentation

For transfers rated as a moderate or high, the documentation must accompany the transfer and be located in the glove box or the driver's side door pocket. See the applicable Subject Area for specific transportation requirements.

## 8. Packaging and Transfer Details


Identify any specific requirements for this transfer (e.g., the specific type of package, labeling requirements, hazard communication requirements, transport routes).

\_\_\_\_\_  
Transportation Safety Officer or SME Approval

\_\_\_\_\_  
Date

### Transportation Assessment Worksheet

Step Evaluation	Low	Med	High
Material Assessment			
Material Hazard Level			
Package Types			
Transfer Assessment			
Transportation Assessment			



Forms
Contact List
TSWG Instructions
Help Desk

**Find Subject Areas:**
Index ▼
Categories ▼
Alpha ▼

Show Side Menu

**Search Subject Areas & Legacy Documents:**

Subject Area: **Transfer of Hazardous Materials Onsite**

### Definitions: Transfer of Hazardous Materials Onsite

Effective Date: **June 2001**

Point of Contact: [Transportation Safety Officer](#)

Term	Definition
hazardous material	A substance that has been determined to pose an unreasonable risk to health, safety, and property when transported in commerce. A hazardous material includes hazardous waste and hazardous substances.
high hazard	Material that, if containment is lost, has been determined to pose an extreme danger or health hazard to the emergency response personnel (e.g., regulatory limits could be exceeded), and significant damage to the environment or equipment will result.
low hazard	Material that, if containment is lost (e.g., the package breaks), has been determined to pose little danger or health hazard to emergency response personnel, and little or no damage to the environment or equipment will result.
Materials of Trade (MOT)	Certain hazardous materials, when used in direct support of Brookhaven's business, may be transported from one location to another by a staff member for his or her own use as Materials of Trade, i.e., hazardous chemicals or other hazardous material that will be consumed by a staff member's work. The regulations for transporting MOT are much less restrictive and are based on a quantity limit for specific Department of Transportation hazard classes. The BNL Materials of Trade (MOT) exhibit provides the quantity limits for MOT commonly used at BNL that can be transported.
medium hazard	Material that, if containment is lost, has been determined to pose a moderate danger or health hazard to the emergency response personnel (e.g., no regulatory exposure limit would be exceeded for radiological or chemical controls), and moderate damage to the environment or equipment will result.
on-site transfer	The transfer of hazardous material between facilities using motorized transport within the confines of the BNL-site boundary.
Transportation Safety Department/Division Point of Contact (POC)	Each Department/Division that has a need to ship or receive any radiological and/or hazardous material will have an established point of contact for transportation safety matters. The TSO or designee, TSWG members, and SMEs normally interact with organizational contacts. These contacts are designated by the Department/Division management. Usually one of the following is identified as the contact: an ESH&Q Representative or ES&H Coordinator. (The contact may also be an SME if training is obtained and maintained). The contact assists in determining transport requirements. If further clarification is needed, the TSO or a Transportation Safety SME is consulted.
Transportation Safety Subject Matter Experts (SME)	Staff designated as SMEs for transportation safety are trained and qualified in a specific area of expertise (e.g., radiological, hazmat, air transport). The TSO or designee, TSWG members, and POCs normally interact with Transportation Safety Subject Matter Experts. The SMEs are designated by the

	Safety Subject Matter Experts. The SMEs are designated by the Department/Division management and approved by the TSO. The SMEs are expected to work in compliance with work planning and BNL transportation safety requirements.
--	--

[Back to Top](#)

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001/standard/2x/2x00I011.htm

Send a question or comment to the [SBMS Help Desk](#)

[Disclaimer](#)

<b>SBMS</b>	Forms	Contact List	SBMS Instructions	Help Desk
-------------	-------	--------------	-------------------	-----------

**Find Subject Areas:**

**Show Side Menu** **Search Subject Areas & Legacy Documents:**

Subject Area: **Transfer of Hazardous Materials Onsite**

Revision History: Transfer of Hazardous Materials Onsite

Point of Contact: [Transportation Safety Officer](#)

## Revision History of this Subject Area

Date	Description	Management System
June 2001	This new subject area describes the procedures and guidelines for ensuring that all hazardous material transferred onsite between BNL facilities is properly packaged, labeled, and handled to ensure the safety of the staff, and is in compliance with the appropriate regulations as defined in the Hazardous Material Transportation Manual Program Description.	Hazardous Material Transportation Safety

**The only official copy of this file is the one online in SBMS. Before using a printed copy, verify that it is the most current version by checking the document effective date on the BNL SBMS website.**

1.0-062001/standard/2x/2x00a011.htm

Send a question or comment to the [SBMS Help Desk](#)  
[Disclaimer](#)